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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,295	08/21/2003	Yasuhiro Mori	25779K-013900US	7197

20350 7590 03/17/2008  
TOWNSEND AND TOWNSEND AND CREW, LLP  
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EXAMINER
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KOEHLER, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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3726

MAIL DATE	DELIVERY MODE
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03/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/645,295	<b>Applicant(s)</b> MORI, YASUHIRO	
	<b>Examiner</b> CHRISTOPHER M. KOEHLER	<b>Art Unit</b> 3726	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-10 is/are pending in the application.
- 4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Noguchi et al. (US Patent No. 5,882,122).

#### *Claim 3:*

Noguchi teaches a method of manufacturing a pivot assembly comprising the steps of mating a first ball bearing (B, figure 6) to a lower end of a shaft (7) to form a first structure; mating an outer circumference of a second ball bearing (A) to an upper end of a sleeve (27) having an inner wall part to form a second structure (bearing and sleeve are mated via fluid disposed in gap); mating the first structure to the second structure by mating the second ball bearing to the upper end of the shaft (7) and mating the lower end of the sleeve to an outer circumference of the first ball bearing so that the inner wall part (27a) is disposed between the first and second ball bearings after the first structure and second structure have been formed; mating a seal member (29) to the upper end of the shaft to cover an outer end face of the second ball bearing (covers the end of member 1 of the second ball bearing); imparting a preload pressure to the inner ring of the second ball bearing (1) by applying pressure on the sealing member (29) (col. 24, lines 3-10); and fixing the seal member to an outer circumference of the shaft (col. 24, lines 18-26).

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Claim 4:

Noguchi teaches forming a sharp edge on an edge part of the seal member (the seal member 29 of figure 6 appears to have sharp edges formed at 90 degrees); causing the sharp edge to stick closely at a point to outer circumference of the shaft (7); and fixing the sharp edge at that point (col. 24, lines 18-26) by laser welding (col. 24, lines 3-10).

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi in view of McAllister et al. (US Patent No. 4,054,334).

Claim 5:

Noguchi teaches the invention cited above. However, the reference does not teach press blanking (or stamping) the seal members.

McAllister discloses stamping seals for bearings (figures 1 and 3).

It would have been obvious to one of ordinary skill in the art at the time of invention to have press blanked (or stamped) the pressure member (seal) of Noguchi, in light of the teaching of McAllister, in order to efficiently form seals.

### ***Response to Arguments***

5. Applicant's arguments filed 12/12/2007 have been fully considered but they are not persuasive.

6. Noguchi teaches a first structure comprising the first bearing and the shaft, and the second structure comprising the second bearing and the sleeve and that all four parts are mated. The fact that the bearings are not directly fixed to the shaft is irrelevant because the claim merely recites that they are in a mating relationship. Lastly, Noguchi inherently provides a preload pressure when abutting 29 to the bearings and thus meets the claim.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER M. KOEHLER whose telephone number is (571)272-3560. The examiner can normally be reached on Mon.-Fri. 7:30A-4:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. M. K./  
Examiner, Art Unit 3726

/David P. Bryant/  
Supervisory Patent Examiner, Art Unit 3726